APPENDIX "F"

Canada. AIR TRANSPORT BOARD

REPORT

ON

REVIEW OF LICENCES RESPECTING COMMERCIAL AIR SERVICES PURSUANT TO SECTION 13 OF THE AERONAUTICS ACT

LICENCES IN

GROUP 6—VANCOUVER ISLAND AND COASTAL B.C.

OTTAWA, CANADA,
APRIL, 1947.

GROUP VI - B.C. COASTAL ISLANDS

SECTION 1

(1) The licences covered by this review in Group 6 are as follows:

Licence No. CTC(AT)80

Operator: Canadian Pacific Air Lines

Route: Vancouver, Victoria, in the Province of British Columbia.

Licence No. CTC(AT)82

Operator: Canadian Pacific Air Lines

Route: Ceepeecee, Chamiss Bay, Esparanza, McBride Bay (Port Tahsis), Nanaimo, Nootka, Port Alberni, Tofino, Ucluelet, Vancouver, Zeballos, in the Province of British Columbia.

Licence No. CTC(AT)83

Operator: Canadian Pacific Air Lines

Route: Alert Bay, Campbell River, Coal Harbour, Englewood, Port Alice, Port Hardy, Port McNeill, Powell River, Quatsino, Rock Bay, Sayward, Vancouver, in the Province of British Columbia.

(2) The history of these licences is as follows:

Licence No. CTC(AT)80

Pursuant to the provisions of the Air Transport Act 1938, Canadian Pacific Air Lines Limited applied to the Board of Transport Commissioners on January 25th, 1943, for a licence to operate a scheduled commercial air service to transport passengers and goods between the terminal points Vancouver and Victoria, in the Province of British Columbia.

Subsequently the Board of Transport Commissioners issued Licence No. CTC(AT)80 on May 12th, 1943, to the company which authorized a scheduled commercial air service between Victoria and Vancouver, in the Province of British Columbia.

Since the inception of the Air Transport Board licence CTC(AT)80 has been renewed from time to time by Order of the Board pending the review of former licences, pursuant to Part II, Section 13, of the Aeronautics Act.

Licence No. CTC(AT)82

Pursuant to the provisions of the Air Transport Act 1938, Canadian Pacific Air Lines Limited applied to the Board of Transport Commissioners on January 25th, 1943, for a licence to operate a scheduled commercial air service to transport passengers and goods between the terminal points Vancouver and Zeballos, in the Province of British Columbia and serving the intermediate points of Nanaimo, Port Alberni, Ucluelet, Tofino, McBride Bay (Port Tahsis) Nootka, Ceepeecee, Chamiss Bay, Esparanza, in the Province of British Columbia.

Subsequently the Board of Transport Commissioners issued Licence No. CTC(AT)82 on May 12th, 1945, to the company which authorized a scheduled commercial air service between Ceepeecee, Chamiss Bay, Esparanza, McBride Bay (Port Tahsis), Nanaimo, Nootka, Port Alberni, Tofino, Ucluelet, Vancouver, Zeballos, B.C.

Since the inception of the Air Transport Board licence CTC(AT)82 has been renewed from time to time by Order of the Board pending the review of former licences, pursuant to Part II, Section 13, of the Aeronautics Act.

Licence No. CTC(AT)83

Pursuant to the provisions of the Air Transport Act 1938, Canadian Pacific Air Lines Limited applied to the Board of Transport Commissioners on January 25th, 1943, for a licence to operate a scheduled commercial air service to transport passengers and goods between

subsequently the Board of Transport Commissioners, company licence No. CTC(AT)90 on May 12th, 1943, to the company which authorized a scheduled commercial air service between Victoria and Vancouver, in the Province of British Columbia.

Since the inception of the Air Transport Board licence CTC(AT)70 has been removed from time to time by order of the Board pending the review of former licences, pursuant to Part II, Section 13, of the Aeronautics Act.

Licence No. CTC(AT)72

Pursuant to the provisions of the Air Transport Act, 1938, Canadian Pacific Air Lines Limited applied to the Board of Transport Commissioners on January 24th, 1942, for a licence to operate a scheduled commercial air service to transport passengers and goods between the terminal points Vancouver and Cumshewa, in the Provinces of British Columbia and serving the intermediate points of Masset, Port Alberni, Tofino, Sandspit Bay (Port Clarke) Moresby, Queenscow, Observatory, Esperanza, in the Provinces of British Columbia.

Subsequently the Board of Transport Commissioners issued licence No. CTC(AT)90 on May 12th, 1943, to the company which authorized a scheduled commercial air service between Vancouver, Victoria and Seattle, Washington, Port Alberni, Tofino, Port Clarke, Moresby, Queenscow, Observatory, Esperanza, Masset, Sandspit, Kamloops, Prince Rupert.

Since the inception of the Air Transport Board licence CTC(AT)72 has been removed from time to time by order of the Board pending the review of former licences, pursuant to Part II, Section 13, of the Aeronautics Act.

Licence No. CTC(AT)73

Pursuant to the provisions of the Air Transport Act, 1938, Canadian Pacific Air Lines Limited applied to the Board of Transport Commissioners on January 25th, 1942, for a licence to operate a scheduled commercial air service to transport passengers and goods between

the terminal points of Vancouver and Port Alice, in the Province of British Columbia and serving the intermediate points Powell River, Alert Bay, Campbell River, Rock Bay, Sayward, Englewood, Port McNeill, Port Hardy, Quatsino, Coal Harbour, in the Province of British Columbia.

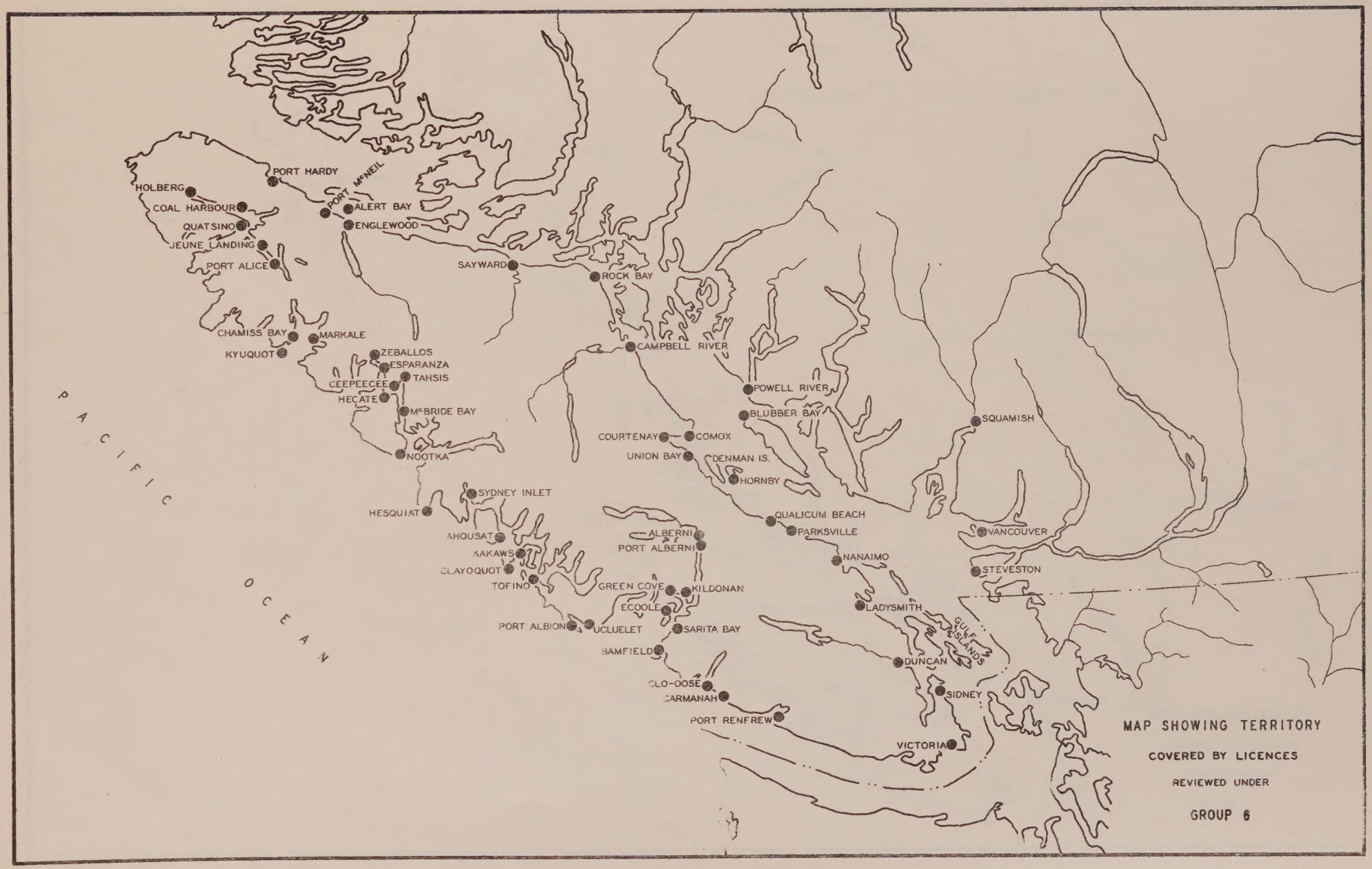
Subsequently the Board of Transport Commissioners issued Licence No. CTC(AT)83 on May 12th, 1943, to the company which authorized a scheduled commercial air service between Alert Bay, Campbell River, Coal Harbour, Englewood, Port Alice, Port Hardy, Port McNeill, Powell River, Quatsino, Rock Bay, Sayward, Vancouver, B.C.

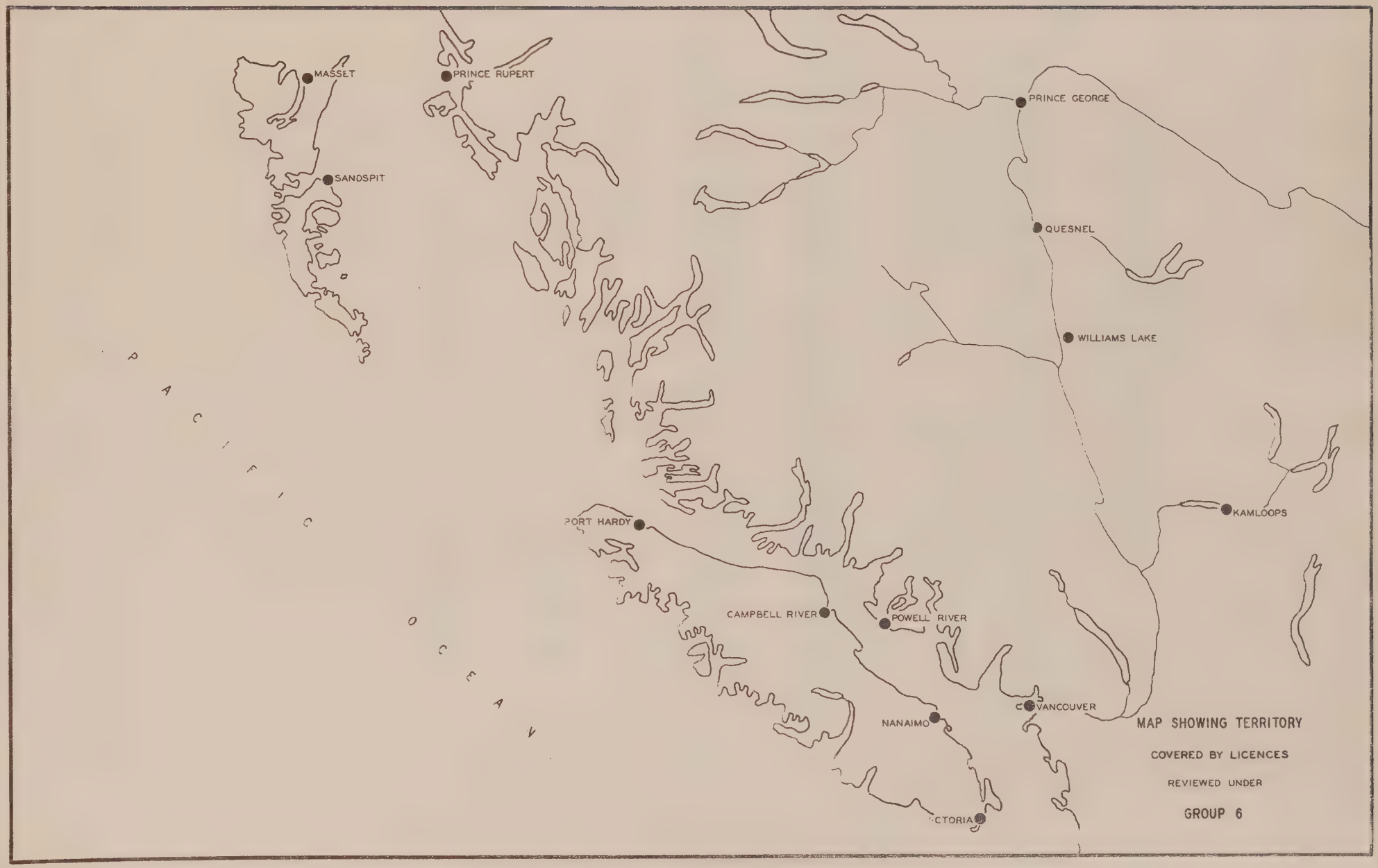
Since the inception of the Air Transport Board licence CTC(AT)83 has been renewed from time to time by Order of the Board pending the review of former licences, pursuant to Part II, Section 13, of the Aeronautics Act.

the terminal points of Vancouver and Port Alberni, in the Province of British Columbia and service the intermediate points Tofino, Alert Bay, Campbell River, Rock Bay, Sayward, Englewood, Port Neville, Port Hardy, Quatsino, Coal Harbour, in the Province of British Columbia.

Subsequently the Board of Transport Commissioners issued Licence No. CTC(AT)49 on May 12th, 1943, to the company which authorized a substituted commercial air service between Alert Bay, Campbell River, Coal Harbour, Englewood, Port Alice, Port Hardy, Port Neville, Powell River, Quatsino, Rock Bay, Sayward, Vancouver, B.C..

Since the inspection of the Air Transport Board licence CTC(AT)49 has been revoked from time to time by Order of the Board pending the review of former licences; pursuant to Part IV, Section 13, of the Aeronautics Act.


PACIFIC OCEAN
HOLBERG
COAL HARBOUR
QUATSINO
JEUNE LANDING
PORT ALICE
PORT HARDY
PORT McNEIL
ALERT BAY
ENGLEWOOD
SAYWARD
ROCK BAY
CHAMISS BAY
MARKALE
KYUQUOT
ZEBALLOS
ESPARANZA
TAHSIS
CEEPEECEE
HECATE
McBRIDE BAY
NOOTKA
CAMPBELL RIVER
POWELL RIVER
BLUBBER BAY
COURTENAY
COMOX
UNION BAY
DENMAN IS.
HORNBY
SQUAMISH
SYDNEY INLET
HESQUIAT
AHOUSAT
KAKAWS
CLAYOQUOT
TOFINO
ALBERNI
PORT ALBERNI
QUALICUM BEACH
PARKSVILLE
NANAIMO
VANCOUVER
STEVESTON
GREEN COVE
KILDONAN
ECOOLE
PORT ALBION
UCLUELET
SARITA BAY
BAMFIELD
LADYSMITH
GULF ISLANDS
DUNCAN
SIDNEY
CLO-OOSE
CARMANAH
PORT RENFREW
VICTORIA
MAP SHOWING TERRITORY
COVERED BY LICENCES
REVIEWED UNDER
GROUP 6


MASSET
PRINCE RUPERT
SANDSPIT
PRINCE GEORGE
QUESNEL
WILLIAMS LAKE
KAMLOOPS
PORT HARDY
CAMPBELL RIVER
POWELL RIVER
VANCOUVER
NANAIMO
VICTORIA
PACIFIC OCEAN
MAP SHOWING TERRITORY
COVERED BY LICENCES
REVIEWED UNDER
GROUP 6

SECTION 2

Airports and Air Navigation Aids Available

Summary

(a) Airports having all facilities for twenty-four hour operation of airline medium type aircraft.

Port Hardy, B.C.	C.T.C. (AT) 83
Vancouver, B.C. (Sea Island)	C.T.C. (AT) 80, 82, 83
Victoria (Patricia Bay) B.C.	C.T.C. (AT) 80

(b) Airports having adequate dimensions for airline medium type aircraft but lacking full air navigation facilities.

Comox, B.C.

(c) Airports with inadequate dimensions, or with few or no facilities or in disrepair.

Nil

(d) Seaplane Bases with full facilities.

Comox, B.C.	
Vancouver, B.C. (Sea Island)	C.T.C. (AT) 80, 82, 83
Victoria, B.C. (Patricia Bay)	C.T.C. (AT) 80

(e) Seaplane Bases with limited facilities and anchorage only.

Alliford Bay, B.C.	
Bella Bella, B.C.	
Coal Harbour, B.C.	C.T.C. (AT) 83
Esquimalt, B.C.	
Fort Rupert, B.C.	
Nanaimo, B.C.	C.T.C. (AT) 82
Port Alberni, B.C.	C.T.C. (AT) 82
Zeballos, B.C.	C.T.C. (AT) 82

(f) Landing Fields and Seaplane Bases with little or no facilities or for emergency use only.

Landing Fields

Cassidy, B.C.	
Masset, B.C.	
Salmo, B.C.	
Sandspit, B.C.	
Tofino, B.C.	C.T.C. (AT) 82

Seaplane Bases

Alert Bay, B.C.	C.T.C. (AT) 83
Armentieres Channel, B.C.	
Big Bay (Gowgaia), B.C.	
Brundige Inlet, B.C.	
Bull Harbour, B.C.	
Campbell River, B.C.	C.T.C. (AT) 83
Captain Cove, B.C.	
Ceepeecee, B.C.	C.T.C. (AT) 82
Chamiss Bay, B.C.	C.T.C. (AT) 82
Easy Creek, B.C.	
Englewood, B.C.	C.T.C. (AT) 83
Esperanza, B.C.	C.T.C. (AT) 82
Estevan Islands, B.C.	
Goose Bay, B.C.	
Hardy Bay, B.C.	
Herschel Island, Y.T.	
Kettle Inlet, B.C.	
Kingkown Arm, B.C.	
Kwakshua Channel, B.C.	
Masset, B.C.	
Matilda Creek (Ahousat), B.C.	
McBride Bay (Port Tahsis)B.C.	C.T.C.(AT) 82
McNeill, B.C.	C.T.C. (AT) 83
Naden Harbour, B.C.	
Nimpkish Lake, B.C.	
Nitinat Lake, B.C.	
Nootka, B.C.	C.T.C. (AT) 82
Port Alice, B.C.	C.T.C. (AT) 83

Seaplane Bases (Cont'd.)

Port Belmont, B.C.	
Port Clements, B.C.	
Port Louis, B.C.	
Powell River, B.C.	C.T.C. (AT) 83
Quathiaski Cove, B.C.	
Quatsino, B.C.	C.T.C. (AT) 83
Queen Charlotte City, B.C.	
Rock Bay, B.C.	C.T.C. (AT) 83
Rose Harbour, B.C.	
Sayward, B.C.	C.T.C. (AT) 83
Security Cove, B.C.	
Shields Bay, B.C.	
Skaat Harbour, B.C.	
Skidegate Channel, B.C.	
Spider Island, B.C.	
Sproat Lake, B.C.	
Thurston Harbour, B.C.	
Two Mountain Bay (Tasu Harbour), B.C.	
Uchucklesit Inlet, B.C.	
Ucluelet, B.C.	C.T.C. (AT) 82
Winter Harbour, B.C.	
Yorke Island, B.C.	

ALLIFORD BAY, B.C. Altitude S.L. Seaplane Base

Position: 53° 12' N. 131° 59' W.

6 miles S.E. of Queen Charlotte City

Alighting Area: Alliford Bay 63° -243°M. 0.6 miles

308° -128°M. 1.5 miles

Skidegate Inlet 28° -208°M. 6 miles

Classification- Good

Break-up)
)
Freeze-up) N.A.

R.C.A.F. 10 buoys

beaching ramp and docks

Facilities: Repairs- Maintenance and Minor

Communication- Telephone and Telegraph

Transportation- Station Marine Craft

Passenger Facilities- Limited at base

Lighting- Portable electric flare path on 30 minutes' notice for alighting in Skidegate Inlet

BELLA BELLA, B.C. Altitude S.L. Seaplane Base

Position: 52° 09' N. 128° 05' W.

Alighting Area: Lama Passage 5 miles (108° - 280°M.)

Seaforth Channel 12 miles (92° - 272°M.)

Bella Bella 3.5 miles (90° - 270°M.)

2 miles (115°- 295°M.)

Freeze-up- N.A.

R.C.A.F. 12 buoys

Facilities: Repairs- Minor Fuel Yes Oil Yes

2 Ramps, Docks, Hoist

Communication- Radio, Telephone, Teletype

Lighting- Portable Electric Flare Path

(30 minutes' notice)

obstruction lights

COAL HARBOUR, B.C. Altitude S.L. Seaplane Base

Position: 50° 36' N. 127° 35' W.

12 miles SSW. of Port Hardy

Alighting Area: Holberg Inlet 090° - 270°M. 3 miles (West end)

Classification- Good

12 buoys R.C.A.F.

Facilities: Hangars

Communication- Telephone

Telegraph in town

Transportation- Marine Craft, M.T. to Port Hardy

Passenger Facilities- Accommodation available at base

COMOX, B.C. Altitude 83' Landing Field
Seaplane Base

Position: 5 miles N.E. of Courtney, B.C.
49° 43' N. 124° 54' W. (L.F.)
49° 45' N. 124° 56' W. (S.B.)

Runways: Nature- Concrete Dimensions 5000' x 200'
5000' x 200'
5000' x 200'

Alighting Area: Comox Harbour NW/SE 1 mile
E/W 3 miles

Classification- Good

1 buoy, Dock.

Facilities: Repairs- Minor Fuel Yes Oil Yes

Hangars

Communication- Radio, Telephone, Telegraph, Teletype.

Transportation- M.T. to Courtney

Passenger Facilities- Hotels at Courtney and Comox

Lighting- Rotating beacon, contact and range lights, portable electric flare path, other facilities under construction.

Radio Range Call Sign VFEX W/T

Frequencies Recs. 2946, 3105, 4495, 5037.5, 6210
Trans. 400

Meteorological Facilities- Dependent forecast station- short flight forecasts.

ESQUIMALT, B.C. Altitude S.L. Seaplane Base

Position: 48° 27' N. 123° 27' W.

4 miles W. of Victoria

Alighting Area: Esquimalt Harbour NNW/SSE 1 mile (small craft only)
Juan de Fuca Strait N/S and E/W 6 miles

Owned by Can. Airways & Dom. Government
Operated by B.C. Airlines
Dock aircraft - no moorings

Facilities: Fuel Yes Oil Yes

Communication- Telephone, Telegraph

Transportation- Taxi

Passenger Facilities- Hotels in town and in Victoria

Lighting- Occulting light on Fitzgerald Island on W. side of Harbour entrance

Meteorological Facilities- Weather information available by telephone from Patricia Bay Airport

FORT RUPERT, B.C. Altitude S.L. Seaplane Base

Position: 50° 42' N. 127° 24' W.

Alighting Area: Beaver Harbour NW/SE 1.5 miles

Between Islands NW/SE 2 miles

Near Thomas Pt. WSW/ENE and WNW/ESE 3 miles

R.C.A.F. 1 Buoy, Sandy Beach

Facilities: Repairs Yes Fuel Yes

Communication- Telephone

Passenger Facilities- (At Port Hardy Landing Field)

NANAIMO HARBOUR, B.C. Altitude S.L. Seaplane Base

Position: 49° 11' N. 123° 56' W.

Alighting Area: Northumberland Channel NW/SE 5 miles

N/S 3 miles

Classification- Good

Break-up N.A.

Freeze-up N.A.

R.C.A.F. 1 Buoy, Docks,
Heavy surface marine traffic

Facilities: Repairs- Limited Fuel Yes Oil Yes

Communication- Telephone, Telegraph

Transportation- Bus, Steamship

Passenger
Facilities- Hotels

Meteorological
Facilities- Weather Reports

PATRICIA BAY, B.C. Altitude 63' Landing Field
10' Seaplane Base

Position: 14 - 16 miles N. of Victoria

Runways: Nature- Asphalt Dimensions 5000' x 200'
5000' x 200'
5030' x 200'

Classification- Good

Ownership- Dom. Government Operated by R.C.A.F.

Alighting Area: Saanich Inlet 070° - 250°M. 4 miles
Patricia Bay 154° - 334°M. 4.6 miles and any other direction

Classification- Excellent

Electric flare path on 30 minutes' notice (emergency 5 minutes) 21 buoys, 2 ramps, dock, travelling crane and derrick

Facilities: Repairs Minor Fuel Yes Oil Yes
Hangars

Communication- Radio, Telephone, Teletype

Transportation- Bus, Boat

Passenger Facilities- Limited
Hotels in Victoria

Lighting- Rotating beacon; code beacon; contact, range and obstruction lights; lighted wind tee

Radio- Control Tower R.C.A.F.
BABS (all runways)

Radio Range Call Sign VFBC W/T
Frequencies Recs. 3017.5, 3105, 3117.5, 4495, 6210
Trans. 233

Meteorological Facilities- Dependent forecast station- short flight forecasts.

PORT ALBERNI, B.C. Altitude S.L. Seaplane Base

Position: 49° 14' N. 124° 49' W.

Alighting Area: Alberni Inlet NNW/SSE 4 miles

Classification- Good

R.C.A.F. 1 Buoy, Dock

Owned by Dom. Government
Operated by C.P.A.L.

Facilities: Repairs- Machine Shop Fuel Yes Oil Yes

Communication- Telephone, Telegraph, Radio

Transportation- Bus, Railway

Passenger
Facilities- Hotels

PORT HARDY, B.C. Altitude 62' Landing Field

Position: 50° 14' N. 127° 23' W.

6 miles S.E. of Port Hardy

Runways: Nature- Asphalt Dimensions 4000' x 150'
5000' x 150'
4000' x 150'

Ownership- B.C. Operated by Department of Transport

Facilities: Repairs- Minor Fuel Yes Oil Yes

Hangars

Communication- Radio, Telephone, Teletype

Transportation- M.T. and Boat

Passenger Facilities- Limited

Lighting- Rotating beacon; code beacon; boundary, contact and obstruction lights; portable electric flare path on request

Radio- Control Tower R.C.A.F.

Radio Range Call Sign- VFGH W/T

Frequencies Recs. 2946, 3017.5, 3105, 4495, 5037.5, 6210
Trans. 350

VANCOUVER, B.C.
(Sea Island)

Altitude S.L.

Landing Field
Seaplane Base

Position: 49° 11' N. 123° 10' W.
8 miles S. of centre of City

Runways

Nature-	Asphalt	Dimensions	3805' x 150'
	Asphalt		5007' x 200'
	Concrete		5170' x 200'

Ownership- Dom. Government
Operated by Department of Transport

Alighting Area:

Fraser River - low tides		065° - 245°M. 4800'
"	Middle Arm" "	098° - 278°M. 2000'
"	High Tides	All river is usable

Buoys, ramps and hoist

Facilities:

Repairs- Minor Fuel Yes Oil Yes
Hangars

Communication- Telephone, Teletype, Radio Telegraph in City

Transportation- Bus to City

Passenger Facilities- Hotels in Vancouver

Lighting- Rotating beacon; approach, contact, range and obstruction lights

Radio- Control Tower

Radio Range Call Sign VFW W/T

Frequencies Recs. 3017.5, 3105, 3117.5, 4495, 6210
Trans. 248

Meteorological Facilities- Central independent forecast station.

ZEBALLOS, B.C. Altitude S.L. Seaplane Base

Position: 49° 59' N. 126° 51' W.

Alighting Area: Zeballos Arm NNW/SSE 1.5 miles

Classification- Good

No Buoys, Floats and Dock

Facilities: Fuel Yes Oil No

Communication- R/T (C.P.A.L.)

Transportation- Steamer

Passenger Facilities- Hotel

SECTION 3

The service rendered under the existing licences as at October 15, 1946 was as follows:

LICENCE NO. 82

In this licence twelve different points are named. Of these, three points receive regular scheduled service; six points are served as flag stops; and three are served indirectly through one of the other points on the licence.

Schedule

Vancouver - Tofino - Zeballos, B.C.

Read down 37 Weekly Tuesday				Read up 38 Weekly Tuesday
AM				PM
8:30	Lv.	Vancouver	Ar.	5:00
f	Ar.	Nanaimo	Ar.	f
f	Ar.	Port Alberni	Ar.	f
f	Ar.	Ucluelet	Ar.	f
10:25	Ar.	Tofino	Lv.	f
10:45	Lv.	Tofino	Ar.	f
f	Ar.	Nootka	Ar.	f
f	Ar.	Ceepeecee x	Ar.	f
f	Ar.	Chamiss Bay	Ar.	f
12:01	Ar.	Zeballos	Lv.	1:30
PM				PM

Equipment: Seaplane
f - Flag Stop
x - Serving McBride Bay, Port Tahsis, and Esparanza

All of the points named in this licence No. 82 appear to receive service as set out in the above schedule.

LICENCE NO. 83

In this licence, twelve different points are named. Of these, three points receive regular scheduled service; seven points are served as flag stops; and two points are served indirectly through one of the other points on the licence.

Schedule

Vancouver - Alert Bay - Port Alice, B.C.

Read down Trip 35 Mon & Sat				Read up Trip 36 Mon & Sat
AM				PM
8:30	Lv.	Vancouver	Ar.	5:00
fS		Powell River		fS
fS		Campbell River		fS
fS		Rock Bay		fS
fS		Sayward		fS
fS		Englewood		fS
10:00 S	Ar.	Alert Bay	Lv.	3:00 S
fM		Port McNeill		fM
fM		Coal Harbour ≠		fM
11:00 M	Ar.	Port Alice	Lv.	2:00 M
AM				PM

Equipment: Seaplane
f - Flag Stop
≠ - Serving Quatsino and Port Hardy with taxi and bus connections
S - Saturday only
M - Monday only

All of the points named in this Licence No. 83 appear to receive service as set out on the above schedule.

SECTION 4

AIR SERVICES IN AREA OTHER THAN THOSE UNDER REVIEW

The following air carriers have applied for and have been granted a licence or a favourable decision by the Air Transport Board to operate -

(A) Scheduled Commercial Air Service:

NIL

(B) Non-scheduled between Specific Points:

NIL

(C) Non-scheduled Charter from Designated Base:

Name of Air Carrier	Base	Decision	Licence No.
Port Alberni Airways Limited	Alberni	Sept.27/46	
Malibu Seaero Limited	Vancouver (Sea Island Airport)		2/45(C)
B.C. Air Lines Limited	Vancouver (Sea Island Airport		4/45(C)
Queen Charlotte Airlines Ltd.	Vancouver (Sea Island Airport)		19/46(C)
Malibu Seaero Limited	Princess Louisa Inlet	Jan. 12/46	

SECTION 5

SURFACE TRANSPORTATION FACILITIES

For the purpose of reviewing the various surface transportation facilities available to the public on Vancouver Island, the services are summarized as follows:

(a) Water

The economy of Vancouver Island in so far as transportation facilities are concerned is largely dependent upon the numerous steamship services operated principally from Vancouver. The weekly sailings to numerous Island points approximate 80 in number and provide the back-bone of inter-community transportation between the various Island cities, towns, and settlements.

There are 31 services per week between Vancouver and points in the southernmost portion of the Island. Between Vancouver and Victoria there are 16 services per week consisting of 2 daily services, a bi-weekly service and a Sunday service. In summertime between Vancouver and the Gulf Islands, Sidney and Stevenston, there are 15 services per week consisting of a bi-weekly service, a daily except Sunday, and a daily service; in the winter there are only 2 trips per week operated.

Between Vancouver and the central portion of Vancouver Island there are 27 services per week during the summer season and 14 per week during the winter season. The year-round service, Vancouver to Nanaimo, consists of 14 schedules per week of which one is a daily service, 1 daily except Sunday, and one Sunday only. In the summer season 2 additional daily services are operated. The shortest elapsed travelling time by these services between the Island and the mainland is approximately 2½ hours.

Three services per week are provided between Vancouver and Comox, a distance of 88 miles. On the outbound trip stops are made at Powell River, Blubber Bay, Hornby Island, Denman Island, and Union Bay; while on the inbound trip, stops are made at Blubber Bay and Powell River only. The shortest elapsed time for the Vancouver-Comox trip is 15 hours.

Between Vancouver and the northern portion of Vancouver Island there are two separate services. One service operates between Vancouver and Alert Bay a distance of 210 miles. Three schedules per week are provided over this route consisting of a bi-weekly service and a weekly service, both of which are part of the Canadian Pacific Steamship services to Prince Rupert and Alaska. The second service operates between Vancouver and Port Hardy by way of Port McNeil and Englewood. This service has a frequency of one schedule per week. It is part of the Canadian Pacific Steamship service between Vancouver and Prince Rupert.

The principal transportation facilities serving Prince Rupert have been reviewed in the foregoing section of this report--British Columbia Mainland and the Yukon. It is only necessary to add here that in addition to the four weekly services performed by the Canadian Pacific and Canadian National Steamship Companies, the Union Steamship Company provides two weekly services between Vancouver and Prince Rupert and an additional fortnightly service to the Queen Charlotte Islands. The Island service makes calls at Morgans Camp, Pacofi, Cumshewa Inlet, Sandspit, Skidegate and Queen Charlotte City on the northbound trip to Prince Rupert; from Prince Rupert to Massett, Port Clements and return to Prince Rupert; and southbound via Sandspit, Skidegate, Queen Charlotte City, Cumshewa Inlet, Pacofi and Morgans Camp to Vancouver.

What may be termed the west coast service operates between Victoria and Port Alice. The average schedule frequency of this service is 3 times per month and provides a 5-day service between Victoria and Port Alice. This service provides water transportation facilities for Port Renfrew, Carmanah, Clo-oose, Bamfield, Sarita Bay, Ecoole, Kildonan, Green Cove, Franklin River, Port Alberni, Ucluelet, Port Albion, Tofino, Clayoquot, Kakawis, Bedwell River, Herbert Arm, Ahousat, Sydney Inlet, Refuge Cove, Hesquiat, Nootka Cannery, Muchalat, Tahsis, Ceepeecee, Hecate, Zeballos, Markale, Chamiss Bay, Kyuquot Village, Winter Harbour, Quatsino, Coal Harbour, Holberg, Jeune Landing and Port Alice.

(b) Rail

Rail services on Vancouver Island extend from Victoria in the south to Courtenay in the northern part of the Island, by way of Duncan, Ladysmith, Nanaimo, Parksville and Union Bay. Port Alberni is connected to Nanaimo by a branch line from Parksville.

A daily except Sunday service is operated over this complete route. Travelling between Courtenay and Nanaimo a distance of 67 miles requires approximately 3 hours; between Alberni and Nanaimo, a distance of 62 miles, requires a travelling time of approximately 3 hours. From Nanaimo to Victoria a distance of 73 rail miles requires a travelling time of nearly 4 hours.

(c) Highway

Highway services in the southern portion of the Island are operated between Victoria and Nanaimo a distance of 80 miles. Seven return schedules are operated of which 5 are on a daily frequency and 2 additional trips are operated on Saturdays and Sundays. The shortest elapsed time for this service is 2½ hours. The schedule of this service is co-ordinated with the Nanaimo - Courtenay and the Nanaimo - Campbell River services so as to provide through service from Victoria to Courtenay and Campbell River. Between Courtenay and Victoria there are two daily services and an additional Sunday service. The distance is 148 miles and requires approximately 6 hours travelling time.

Two daily services and one tri-weekly service are operated between Nanaimo and Port Alberni. This is a distance of 56 miles and requires approximately 2 hours, 15 min. travelling time. The scheduling of the Victoria - Nanaimo and Nanaimo - Port Alberni services are such as to provide a through service between Victoria and Port Alberni. Two daily services and an additional Sunday service are operated. The minimum elapsed travelling time is 5 hours, 15 min.

Between Nanaimo and Campbell River two daily return services are operated via Qualicum Beach and Courtenay. One of the return services is operated daily except Sunday over the Campbell River - Courtenay sector. The shortest elapsed time by this service is 3 hours, 30 min.

In addition to the daily through services, local services are operated between the principal intermediate points along the route. Between Campbell River and Courtenay, there are two daily services, a daily except Sunday and an additional Saturday service;

while between Courtenay and Campbell River there are two daily services and a daily except Sunday service. The elapsed time for travel between Courtenay and Campbell River by this local service is one hour.

(d) Tractor

There is no tractor service in this area.

SECTION 6

ECONOMIC CHARACTERISTICS

(1) GENERAL REVIEW OF THE AREA

To facilitate a review of the economic characteristics of Vancouver Island this portion of the report is divided into three sections, based upon the following geographical areas:

(a) The southern portion of the Island - including Nanaimo, Port Alberni, Ucluelet and Tofino.

(b) The central portion of the Island - including Nootka, McBride Bay, Ceepeecee, Esparanza, Zeballos and Chamiss Bay on the west coast; and Sayward, Rock Bay and Campbell River on the east coast. Although situated on the mainland coast, Powell River is included with this group as it is on the route of the water transportation services to and from the Island.

(c) The northern portion of the Island - including Port Alice, Quatsino, Coal Harbour, Port Hardy, Port McNeil, Alert Bay and Englewood.

(d) The Queen Charlotte Islands and Prince Rupert.

(a) The Southern Portion of the Island

Nanaimo

Nanaimo, approximately 70 miles north of Victoria by road, is on the east coast of the Island facing the mainland and the Gulf of Georgia. In 1941 it had an urban population of 6,635 and is primarily a coal mining centre. The largest operating mine, owned by Canadian Collieries Ltd. employed, in 1944, 479 people and the average annual value of coal production exceeds $1,000,000. Other small mines near the city, including the Lake Road, Biggs and Lewis No. 3, produced $14,150 worth of coal in the same year. Only bituminous coal is mined, there being no anthracite in the area.

Of considerable importance to the economic life of the city are the 22 manufacturing plants having a gross product value in 1944 of $2,425,500. These concerns employed 385 people with salary and wages amounting to $635,000. An indication of the general nature of the economic life of the city, apart from coal mining, may be obtained from the various types of business concerns which include 5 bakeries, 1 biscuit manufacturer, 2 mineral water bottlers, 4 sawmills, 2 dairies, 1 butter and cheese plant, 2 boat building and repair plants, 1 iron casting plant, 2 machine shops and 2 printing concerns.

That Nanaimo is a lumber manufacturing point as well as the centre of a dairy farming area is evidenced by the number of sawmills (4) and concerns engaged in the processing of dairy products (3). A fishing fleet of fair size utilizes Nanaimo as a home port and obtains necessary refitting and repairing from the local machine and boat repairing shops.

The manufacturing plants as well as domestic consumers obtain electric power from Victoria, some 18,000,000 K.W. hours per year being purchased from that source as compared with local production of about 4,500,000 K.W. hours.

Nanaimo's proximity to the much larger distributing facilities at Vancouver and Victoria has prevented the development at this point of a wholesale business of any consequence. Retail stores, however, supply not only Nanaimo residents, but others who come to the city from the surrounding area, though the number of the latter is not large since their needs can also be supplied in the neighbouring towns of Wellington and Ladysmith. Retail sales totalled $5,850,000 in 1941, employment being given to 468 people in the 176 stores.

Port Alberni

Almost directly west of Nanaimo, at the head of the 30-mile long Alberni Inlet on the west coast of the Island, lies the town of Port Alberni. Though only forty air miles from Nanaimo, the rail distance by the Esquimalt and Nanaimo railway is, because of the rough terrain, 61 miles, and the highway distance via Parksville, about 20 air miles north of Nanaimo, is almost as long. With a population of 4,584 in 1941, Port Alberni is primarily a lumber processing town as is indicated by a census of manufacturing plants which include 4 sawmills, 1 planing mill, 1 plywood and veneer factory, 3 bakeries and a publishing concern. The total value of manufactured products in 1944 was $7,687,942, and approximately 1,000 people were employed in manufacturing activities.

Electric power for its manufacturing plants is obtained chiefly from Nanaimo; approximately 3,325,000 K.W. per year being purchased from that source, while some 250,000 K.W. are generated locally.

Timber is transported to Port Alberni in raft form from the logging operation sites along the west coast of the Island, and by logging trains from the area between Sproat and Great Central Lakes to the northwest and the Beaufort Mountain Range to the northeast. A number of fishing craft make the town their harbour since it is well sheltered at the end of the long inlet.

Although the town's proximity to larger points prevents its having a large wholesale trade, there is a substantial number of retail stores - 97 in 1941 - handling a retail sales volume of $2,340,000 and employing 178 people. Port Alberni is the source for some of the supplies used in the development work being done on the Havilah and Black Panther gold properties on Alberni Inlet and the Sherwood and Cangold Mining Company gold prospects on Drinkwater Creek, 35-40 miles north of the city.

Ucluelet

Outside of the mouth of Alberni Inlet the village of Ucluelet stands on the north shore of Barkley Sound. The small harbour is sheltered from the Pacific by a neck of land which forms an inlet. Its tiny population of 78 people is largely Indian, as is a substantial portion of the population of most of the coast fishing towns of northern Vancouver Island. There are only two manufacturing establishments, a fish reduction plant manufacturing oil, feed and fertilizer from fish refuse, and a bakery. The ten retail stores and three wholesale houses employ 13 people and do a total business of $200,000 per year.

Tofino

Tofino, with a population of 246, in 1941, is another fishing town 21 miles north of Ucluelet. The limited nature of its economic activities may be appraised from the fact that its only manufacturing establishment is a small machine shop while the 4 small local retail stores employ only 15 people and do a yearly gross business of less than $100,000.

Most of the supplies for the development work being undertaken on the Berton Gold Mine properties at the head of Herbert Arm and the gold prospects on Bedwell Sound are distributed from Tofino, being brought to that point by Canadian Pacific Steamships and taken on by gas boat.

(b) The Central Portion of the Island

Nootka

Forty-six miles north of Tofino is the small fishing town of Nootka on the southern extremity of Nootka Island. The 89 (1941) inhabitants of the town are engaged either in fishing or in the two small fish plants, one of which is devoted chiefly to the canning of salmon and the other to the canning of sardine and other fish. The town has only 2 stores, one retail and one wholesale, employing a total of 4 people in addition to the proprietors.

McBride Bay

McBride Bay (Port Tahsis) is an even smaller town than Nootka. Its population was only 16 in 1941, most of which found employment in the 2 small sawmills located on Tahsis Inlet which is formed by the east coast of Nootka Island and the west coast of Vancouver Island. McBride Bay has neither wholesale nor retail stores.

Ceepeecee

The town of Ceepeecee lies in the narrows separating Nootka Island from Vancouver Island. The 28 residents in 1941 were all engaged in fishing, or in the processing of fish in the 2 small fish reduction plants, or in the 3 local stores which have an annual gross volume of sales amounting to $60,000.

Esparanza

It is situated on Esparanza Inlet, on the arms of which Zeballos and Ceepeecee are also located and no economic data is reported for this point.

Zeballos

The mining town of Zeballos is at the head of Zeballos Arm which reaches a few miles inland from Esparanza Inlet. The nearby Privateer Mine, largest in the area, has been under development for several years though it was not in production in 1945. In that year over $32,000 was spent on exploratory work upon which 23 men were engaged. The mine was expected to be back in production late 1946. The other main producers, Spud Valley and Central, which were, like the Privateer, shut down in 1942 because of war conditions, had not been re-opened by the end of 1945. Prospectors were active in the Zeballos area in 1945 and 6 properties which appeared to have good prospects were undergoing development.

There is one sawmill located in the town which, with gold mining, assists in stimulating sufficient business for the 21 small retail stores and the one wholesale house located there. Its population of 698 in 1941, makes it the third largest centre on the west coast of Vancouver Island, surpassed only by Port Alberni and Port Alice.

Chaniss Bay

Chaniss Bay is a town of 58 persons in 1941, situated on Kyuquot Sound about 25 miles north of Esparanza Inlet. It is a fishing village which has no manufacturing plants, no wholesale establishments and no retail stores.

Sayward

Sayward is situated on Salmon Bay at the mouth of Salmon River, 48 miles southeast of Alert Bay. The 1941 Dominion Census recorded only 14 people in this community. There is estimated to be approximately 40,000 acres of land suitable for farming in the valley of the Salmon River with large areas of logged-off land awaiting possible development. As of the present time development has been slow, although with the extension of the Island Highway north from Campbell River increased settlement may be expected.

Rock Bay

Nineteen miles south of Sayward is the town of Rock Bay which is the outlet for the product of an important logging area. A logging railroad with branches reaching in all directions extends from the town into the valleys and foothills where the trees are felled. The absence of any statistical records of retail and wholesale sales indicates that Rock Bay is a company town for which no provincial trade statistics are available. There was a population of 391 in the Rock Bay district at the last census.

Campbell River

Campbell River is about 24 miles below Rock Bay and about 85 miles northwest of Nanaimo. Situated near the mouth of the Campbell River it is a lumbering, fishing and tourist centre. In 1941 the majority of the permanent population of 892 is employed either in the sawmill or the salmon canning plant. Campbell River is well known in the northwest as a splendid salmon fishing area and a sizeable tourist trade is being developed on this basis. The tourist business is reflected in the volume of retail and wholesale sales which approximate $442,000 and $94,000 respectively.

Powell River

Powell River is situated on the mainland coast bordering the Gulf of Georgia and almost directly opposite Campbell River. With a 1941 population of 782 in the town itself, and with 14 manufacturing plants either in the town or in the nearby area, Powell River is a manufacturing centre of some importance. These 14 plants include a large paper mill, 6 sawmills, a sardine canning factory, a furniture plant, 2 bakeries, a mineral water bottling works, and 2 printing and publishing plants. In 1944 the value of manufactured products in the town and its neighbouring area was $14,000,000. Approximately 1900 people were employed, many of them in logging operations throughout the

surrounding area. As the pulpwood company has its own stores, whose sales do not show in provincial statistics, the sales of retail and wholesale stores do not reflect total business. However, available data reveal 32 retail stores employing 76 people and having annual gross sales of over $700,000, and 4 wholesale stores employing 5 people with a gross business of $220,000.

(c) The Northern Portion of the Island

Port Alice

With a 1941 population of 807 people, Port Alice is the largest town on the west coast of Vancouver Island north of Port Alberni. Situated at the head of Neroutsos Inlet on an arm of Quatsino Sound it is in a good pulpwood area and is the site of a large pulp and paper mill upon which is based the main economic activity of the area. Its ten retail stores have a total annual sales volume of approximately $215,000.

Quatsino

Quatsino, on the north shore of Quatsino Sound directly opposite the Inlet on which Port Alice is situated is a fishing town of 169 persons. There are only 2 small business concerns, one a wholesale establishment and the other a retail store. The total trade approximated $25,000 in 1941.

Coal Harbour

Coal Harbour is situated at the entrance of Holberg Inlet a distance of 4 miles from Quatsino. It is a small fishing village with a population of only 75 people. The 6 small stores, 3 retail and 3 wholesale do a total annual business of $234,000 and employ 8 people.

Port Hardy

It is necessary to cross to the east coast of Vancouver Island from Coal Harbour to reach Port Hardy some 10 miles away. On the western shore of Hardy Bay, about 40 miles south of the northernmost tip of Vancouver Island, the town is a logging centre with a population of 192 persons at the last census date. The inhabitants are supplied by 12 stores doing a total business of $67,000.

Port McNeil

Behind Malcolm Island, some 20 miles down the Vancouver Island coast from Port Hardy, is the lumbering town of Port McNeil. The 1941 population of 290 persons was engaged chiefly in working in the two local sawmills. Retail and wholesale trade is of small volume, annual retail sales being reported at less than $50,000.

Alert Bay

Eight miles further down the coast of Vancouver Island, Alert Bay is situated on the southern shore of tiny Cormorant Island. It is a fishing town of fair size for the area, the population being 460 people, and made up mostly of Indians. Some indication that the town is a supply centre is obtained from the fact that 18 retail and 4 wholesale stores with sales of $215,000 and $96,000, respectively, are established there.

Englewood

Four miles Southeast of Alert Bay, the town of Englewood stands on the north shore of Beaver Cove. It is the terminal of a logging railway running about 8 miles inland to Nimpkish Lake and Nimpkish River. Apart from the logging industry, business activity is small as there are no manufacturing plants of any kind, no wholesale establishments and no retail stores. The population was only 172 in 1941.

The following table has been prepared to summarize the 1944 industrial production of Vancouver Island for each area reviewed in this section:-

Section	Number of Employees	Gross Value of Product
Southern		
Tofino - Ucluelet area	250	$1,255,914
Port Alberni	1,016	7,687,942
Nanaimo	871	3,810,450
Central		
Sayward - Campbell River area	106	194,750
Northern		
Nootka - Quatsino - Port Hardy - Englewood area	735	5,904,482

(d) The Queen Charlotte Islands and Prince Rupert

The Queen Charlotte Islands have a land area of 3,970 square miles and a population density of 0.59 inhabitants per square mile. In 1941 the total population of 2,335 was composed of 1,544 people in unorganized parts and 791 on Indian reserves. One of the principal industries of the Islands is fishing and its extent is indicated by the canned salmon pack. Production in recent years has been

1942	144,145 cases
1943	50,224 cases
1944	192,702 cases
1945	18,053 cases

The small quantity canned in 1945 is not indicative of a decrease in the fishing industry because the increased demand from freezing plants diverted a substantial proportion to the frozen fish trade at the expense of the canners.

On the Islands, which form a part of the Prince Rupert forest district, are found the major stands of Sitka spruce in British Columbia. The Islands produce two-thirds of the output of the Prince Rupert district, about 65% is spruce largely destined for the pulp and paper mill at Ocean Falls. The distribution and extent of forest reserves is indicated in the following table:

	Accessible Merchantable Acreage	Merchantable Timber				
		Spruce	Western Hemlock	Western Red Cedar	Yellow Cedar	Total
		(Thousands of Board Feet)				
Graham Isl.	266,700	1,449,800	1,538,700	974,400	145,100	4,108,000
Moresby Isl.	252,200	1,835,200	2,249,200	972,200	89,700	5,146,300
Total	518,900	3,285,000	3,787,900	1,946,600	234,800	9,254,300

Prince Rupert is the supply and distribution centre for the central west coast district. It is the centre of the British Columbia halibut industry and the main business centre for the surrounding mining, lumbering and agricultural areas. The urban population in 1941 was 6,714 people. On the basis of a 25-mile area, retail sales amounted to $4,675,000; wholesale sales, $3,083,000; and gross manufacturing production, $8,766,000. The average earnings of 2,686 wage earners amounted to $1,042 in 1941.

(2) TRAVEL HABITS

For the purpose of reviewing the travel habits of the people of Vancouver Island this section of the report is divided into three parts dealing with the southern, central and northern portions of the Island.

While the City of Vancouver is considered in the report - British Columbia Mainland and the Yukon - yet due to its influence on travel originating on Vancouver Island it must be included in this report.

(a) Southern Portion of Vancouver Island

Vancouver

On the basis of the Inter-Community Travel Survey made in 1945, Vancouver has a high volume of in-bound and out-bound travel. Of travel terminating at Vancouver, approximately 30% originates within the Province, 5% from each Alberta, Manitoba and Ontario, 2% from each Saskatchewan and Quebec, and 1% from the Maritime Provinces. About 50% of the in-bound travel originates outside of Canada of which 46% is from the United States and 4% from other foreign countries.

Of travel originating at Vancouver, approximately 80% terminates at points within the Province, 4% to each of Alberta and Ontario, 3% to Manitoba and 1% to each of Saskatchewan and Quebec, 1% to the Maritime Provinces and 6% to the United States.

The relation that Vancouver bears to communities on the Island is indicated by the following table which shows the percentage of contribution of each locality on the Island to the total hotel registrations of provincial origin for a twelve month period:-

FROM:	Percent of Provincial total (31,344)
Alberni	.79
Alert Bay	.26
Campbell River	.72
Ceepeecee	-
Chamiss Bay	-
Coal Harbour	.06
Courtenay	6.29
Duncan	3.41
Englewood	.04
Esperanza	-
McBride Bay	-
Nanaimo	6.68
Nootka	.12
Port Alberni	4.38
Port Alice	.15
Port Hardy	.04
Port McNeil	.04
Quatsino	.04
Rock Bay	.09
Sayward	.01
Tofino	.19
Ucluelet	.36
Victoria	34.88
Zeballos	.40
Total	58.95

Sixty representative business concerns report a personnel of 680 travelling each month. A division of this travel indicates that approximately 16% is to Victoria, 15% to other points within the Province, 14% to western Canadian cities, 5% to Montreal, 5% to Toronto and 16% to other eastern cities. About 29% of business travel is to the United States including 15% to Seattle, 7% to San Francisco, 3% to New York, and 4% to other American cities.

When business travel is classified according to the method of travel, it is indicated that approximately 35% is by air, 28% by rail, 23% by boat and 14% by private car.

Twenty-five firms report holding company functions in Vancouver. Fifteen of these are annual functions with an average attendance of 2,325 people while 10 are other regular functions with an annual attendance of 1,812 people.

Nanaimo

Of travel originating at Nanaimo, 91% terminates at points within the Province, 2% in Alberta and Ontario, 1% each in Saskatchewan and Manitoba, 1% at points in Quebec and the Maritime Provinces, and 2% in the United States. Of the total traffic originating in Nanaimo and terminating at points within the Province, 41% is to Vancouver, 19% to Courtenay, 14% to Victoria, 4% to Duncan, 3% to Port Alberni, and the remaining 10% distributed between other Island and Mainland communities.

Of travel to Nanaimo, 88% originates within the Province, including 57% from Vancouver, 17% from Victoria, 5% from Port Alberni, 4% from Courtenay and 1% from each of Duncan and Campbell River, and 3% from other points within the Province. Travel from the United States accounts for 7% of the total.

Most of the business travel reported by firms at Nanaimo consists of weekly trips to Vancouver. No company functions are held in Nanaimo but approximately 10 conventions per year are reported. The total yearly attendance approximates 900 people drawn wholly from the lower mainland of British Columbia.

Port Alberni

Of travel originating at Port Alberni approximately 99% terminates at points within the Province and 1% throughout Canada. The provincial travel consists of 42% to Vancouver, 30% to Nanaimo, 15% to Victoria, 6% to Courtenay and 6% to other Island and mainland points.

Hotel registrations at Port Alberni indicate that 93% of the travel originates from points within the Province; consisting of 39% from Vancouver, 13% from Victoria, 7% from Nanaimo, 2% from Courtenay and 32% from other points. The remaining 7% of total registrations include 2% from each of the provinces of Alberta and Ontario, 1% from Saskatchewan, 1% from eastern Canada, and 1% from United States.

Three representative business concerns report a personnel of 27 travelling each month. This travel is confined to Vancouver and is done by car and boat.

Tofino & Ucluelet

The travel habits of the people of Tofino and Ucluelet are largely local in nature, and, as indicated by the following table based on the volume of hotel registrations over a 12-month period, are principally related to Port Alberni and Vancouver.

FROM: TO:	Vancouver	Nanaimo	Port Alberni	Campbell River
Tofino	60	96	335	-
Ucluelet	112	66	255	-
Total	172	162	590	-

(b) Central Portion of Vancouver Island

Campbell River

An analysis of hotel registrations indicates that 98% of the travel from Campbell River terminates within the Province, 1% to the United States and 1% to other Canadian Provinces. The provincial travel consists of 32% to Vancouver, 30% to Nanaimo, 25% to Courtenay, 7% to Victoria, and 4% to other Island and Mainland points.

Of travel to Campbell River, 90% originates within the Province, 3% from other Canadian Provinces, 6% from the United States and 1% from other foreign countries. Travel originating within the Province consists of 43% from Vancouver, 18% from Victoria, 14% from Nanaimo, 4% from Courtenay, and 11% from other Island and Mainland points.

Four representative business concerns reported a personnel of 9 travelling each month, the travel of which is almost entirely to Vancouver and is made by boat, rail and highway.

Other Communities

The volume of travel originated by the communities of Nootka, McBride Bay, Ceepeecee, Esparanza and Zeballos on the western coast of Vancouver Island, is, with the exception of Zeballos, negligible. The following table indicates the general volume and distribution of the generated travel:

FROM: \ TO:	Vancouver	Nanaimo	Port Alberni	Campbell River
Nootka	39	-	-	-
McBride Bay	-	-	-	-
Ceepeecee	-	-	-	-
Esparanza.....	-	-	-	-
Zeballos	124	51	6	-
Total	163	51	6	-

Communities situated on the "inside passage" originate a larger volume of intercommunity travel than do those on the west coast. Sayward, Rock Bay, Campbell River and Powell River terminate approximately 90% of their combined originated travel at Vancouver.

FROM: \ TO:	Vancouver	Nanaimo	Port Alberni	Campbell River
Sayward	4	1	7	13
Rock Bay	29	2	-	-
Campbell River...	227	166	3	-
Powell River	873	59	7	7
Total	1,133	228	17	20

(c) Northern Portion of Vancouver Island

While the volume of travel originated at Port Alice, Quatsino, Coal Harbour, Port Hardy, Port McNeil, Alert Bay and Englewood is relatively small, the following table based on hotel registrations for a 12-month period indicates the general flow of this traffic to Vancouver:--

FROM: / TO:	Vancouver	Nanaimo	Port Alberni	Campbell River
Port Alice	46	7	2	1
Quatsino	11	-	-	-
Coal Harbour	20	1	-	-
Port Hardy	14	13	3	3
Port McNeil	11	-	-	2
Alert Bay	82	6	1	11
Englewood	12	-	-	-
Total	196	27	6	17

Considering Vancouver Island as a unit, the foregoing divisions of travel indicate that for the points under review 69% of total generated traffic terminates at Vancouver, 17% at Nanaimo, 10% at Port Alberni and 4% at Campbell River. Hence, approximately two-thirds of the generated traffic is directly related with the trade center, and one-third is local traffic. With the exception of the larger communities of Courtenay, Nanaimo, and Port Alberni, there is a minimum of inter-community relationship between points on the Island. To some extent this may be attributed to the prevailing inconveniency of surface transportation facilities and to the fact that many communities function quite independently of each other.

(d) Queen Charlotte Islands and Prince Rupert

(2) The volume of travel originated in the Prince Rupert area approximates 2% of the total British Columbia registrations at Vancouver. The volume and distribution of registrations over a twelve month period is indicated by the following table:

FROM:	Registrations at Vancouver
Prince Rupert	618
Queen Charlotte Islands	44
Terrace	29
Stewart	54
Total	745

An analysis of registrations at Prince Rupert during the same period indicates the following traffic origins:

FROM:	Registrations at Prince Rupert
Vancouver	971
Victoria	138
Other Vancouver Island localities	23
Southern British Columbia	13
Other British Columbia localities	578
Total	1723

(3) TRANSPORTATION REQUIREMENTS

The review of surface transportation facilities serving Vancouver Island indicates that the water services may be classified into three general types. One type is that whereby communities receive service subsidiary to main route operation. The service between Vancouver and the northern Island communities of Englewood, Port McNeil and Port Hardy, which is part of the Vancouver - Prince Rupert service, is an example of this type. When the volume of traffic supplied by the intermediate points is not large it is economical to serve them in this manner, and furthermore, it has the advantage of concentrating traffic over one route and thereby giving intermediate points a higher standard of service than their traffic would actually warrant. However, as the scale of service provided is directly related to the traffic requirements of the terminal points, there is a resulting lack of flexibility at the intermediate points, and while this may be of little consequence in the movement of freight and supplies, yet it may be of considerable importance in the movement of passengers.

The second type of service is that which is provided as a single operation from a major terminal to a number of smaller communities. This is the type of service which originates at Victoria and serves the communities along the west coast of the Island. For points of call along this route no other surface facilities exist, and yet the volume of traffic is so small that only a very infrequent service is warranted.

The third type of service is that which is operated directly between principal traffic points; as from Vancouver to Nanaimo, and, Vancouver to Courtenay. These services combine flexibility and frequency and may be directly adjusted to meet changes in traffic requirements.

The highway facilities on the Island serve the south and south-eastern coastal areas between Sayward and Victoria, where the majority of the population is concentrated and where the highways have been built. Rail transportation duplicates to a considerable extent the highway facilities, serving the coastal area between Courtenay and Victoria.

Due to the small population in the western and northern portions of the Island the high initial cost of extending rail or highway facilities to this area is not warranted. The most economical method of serving these localities continues to be by water carrier rendering cheap transportation for freight and supplies. However, from the standpoint of fast passenger movement, water carriers do not, and by force of circumstances can not, render a wholly adequate transportation service. Giving due consideration to the geographical location of the various communities under review, the small population involved, the lack of rail and highway facilities, and the fact that the majority of existing travel gravitates towards Vancouver, it appears that air service is a possible solution to the Island's transportation problem. The small volume of traffic apparent from the review of travel habits, indicates that regular air services originating at Vancouver and tapping individual communities, as from the south to the north along the west coast of the Island, mitigates against a desirable frequency and flexibility of operations, and is not economically possible. The total volume of travel is so small that only the consolidation of all originating and terminating travel over a minimum number of routes appears to offer an economic solution.

Considering the southern portion of the Island, it appears that a regular and frequent service between Nanaimo and Vancouver is required. However, this distance is but 33 miles, and for communities west of Nanaimo the combined rail-air, or highway-air, service to Vancouver would not be of maximum benefit. An extension of the Vancouver - Nanaimo air service by means of a charter service at Port Alberni would improve the conveniency of the service for the coastal points of Tofino and Ucluelet. Tofino and Ucluelet themselves do not require a scheduled air service, but by utilizing the existing water service between Tofino, Ucluelet and Port Alberni, or as an alternative a charter service, for connections with the scheduled air service between Nanaimo and Vancouver, a more economical service could be rendered within this area.

The central portion of the Island includes localities having various transportation requirements and many must of necessity be served by float equipped aircraft. Within the west coast section, principally in the area surrounding Zeballos, there are a large number of incidental trips to be performed which can only be undertaken by charter operations. Nootka does not require an air service, while the requirements of Esparanza, Chamiss Bay, Ceepeecee and McBride Bay can be satisfactorily served from a base at Zeballos. Furthermore, passengers from these latter points have the alternative of transportation to Zeballos by water. Similarly, the requirements of Sayward and Rock Bay may be served by charter from Zeballos. Campbell River has satisfactory boat service to Vancouver and highway service to Nanaimo, and irregular and emergency requirements for air transportation could be provided from Zeballos. Traffic originated at Zeballos, together with that from localities in the surrounding area, may at times warrant regular service, but, as this district can only be served by float equipped aircraft, it is not possible to include it as an intermediate point on a route over which a high standard of scheduled service to a major terminal is maintained. Under these conditions it appears that some standard of service is required in this area, and, from an economic operational standpoint, it should be a charter service.

While Powell River is considered as a community within the central Island group, yet its individual characteristics require that it be treated separately. Powell River is 79 air miles from Vancouver along a difficult portion of the mainland coast where weather conditions and the lack of airway facilities have in the past made safe, regular and reliable air services exceedingly difficult to maintain. In the opinion of C.P.A.L. officials this combination of circumstances has been such as to materially reduce the benefit inherent to air service at Powell River, with the result that it has not been patronized. Under prevailing circumstances, it is doubtful whether Powell River can be served by an air service with a high standard of regularity, probably the most feasible solution would be either an irregular service from Vancouver or through a connection at Comox on a possible Port Hardy - Vancouver route.

For localities within the northern portion of the Island, the requirements for air transportation are similar to those existing in the central portion. There appears to be a necessity for a charter service within the area bounded by Port Alice and Englewood on the south and Port Hardy on the north. No individual locality within this area requires a direct and regular service to Vancouver, but giving consideration to the total requirements of all points

there appears to be a necessity for such a service; a regular service between Vancouver and the northern portion of the Island would permit traffic to be consolidated over a single route. Due to operating conditions and existing facilities, it appears that Port Hardy should be the northern terminal of the route. Traffic from Port Alice and Quatsino could be funnelled into Coal Harbour by water taxi and thence to Port Hardy over the Coal Harbour - Port Hardy highway. The total distance, Port Alice to Port Hardy via Quatsino and Coal Harbour is but 27 miles. Traffic originated at Englewood, Alert Bay and Port McNeil could also be funnelled into Port Hardy by a water taxi service, the overall distance Port Hardy to Englewood via Port McNeil and Alert Bay being 28 miles.

In considering the transportation requirements of Vancouver Island from an air service standpoint certain characteristics are notable. In the first place, the population of individual localities is relatively small, but within the 3 portions of the Island, such localities are grouped quite closely together; in the southern portion the average distance between localities is 32 miles, in the central portion 18 miles, and in the northern portion 9 miles. Secondly, for a number of the Island communities the basic economy is the logging industry, and the principal requirements is for transportation to the logging sites within the surrounding area. Furthermore, while this type of community may be very active at certain periods, nevertheless, the long term requirements are such that a regular service is not required. Finally, the combination of weather, terrain and facilities may mitigate against the efficient, and even possible operation of a regular service, leaving as the only alternative, a charter service.

(3) The transportation requirements of the Queen Charlotte Islands and Prince Rupert are for an improved service complementing the existing water and rail facilities. At the present time there are six water services per week between Vancouver and Prince Rupert and a fortnightly service connecting with the Islands; the minimum travel time being 36 hours. By the tri-weekly rail service between Prince Rupert and Vancouver the minimum travel time is 48 hours. It appears that the existence of airway facilities and the requirements of economical operation would require the consolidation of available traffic over the proposed Vancouver - Port Hardy route by extending the main service from Port Hardy to Sandspit and connecting with an amphibious service between Sandspit and Prince Rupert.

(4) AIR TRAVEL POTENTIAL

As noted in the section on economic characteristics the population of the individual localities is relatively small. Of the four localities under review in the southern portion of the Island the population varies from approximately 80 to 6,600 people, and the two largest points have combined population of less than 11,000. Of the ten localities under review in the central portion of the Island, the total population is approximately 3,000 of which 2,800 is concentrated between the four principal points of Zeballos, Rock Bay, Campbell River and Powell River. The population of the six remaining communities is very small, varying between 14 and 90 people. The seven localities under review in the northern portion of the Island have a total population of approximately 2,200 people; over 50% of which is divided between Port Alice and Alert Bay, with the remaining five communities having an average population of 180 people.

The transportation facilities available to the people within these 3 areas vary all the way from the standards of service available at Nanaimo, which include rail, highway and water transportation of a high frequency, to the west coast points, which receive service by water on an average of 3 times per month. This variation in services and frequencies has been the result of local conditions. As water service, which is the basic transportation method of the Island, will, by present indications, continue to occupy the primary role, the establishment of air service facilities will complement existing surface carriers. The principal problem for the Island is not one of seasonal transportation where air services are required to provide the only method of transportation; nor is it a problem of transportation over long distances over difficult terrain; rather it is a problem of providing a more convenient means of transport complementing the existing service, and secondarily, to provide fast transportation over relatively short distances. The former type of complementary service draws its traffic by competing with the surface carriers, and as such its traffic development depends upon the competitive factors of convenience, reliability and rates. It must be realized that for the localities under review, population and business activity are such limiting factors that air service cannot be expected to develop a substantial volume of new travel which surface carriers were never able to develop.

The air travel potential of the latter type with a short distance transport depends primarily upon developments within the lumber industry and indirectly it has an important effect upon the volume of the trade centre traffic. It is noted that two trends are evident when a study is made of air travel based upon the lumber industry. The first is a seasonal trend which shows increases and decreases in travel corresponding to fluctuations in the lumbering industry. This trend also includes the seasonal movement of employees into and out of the various districts. The second is a cyclical trend, which shows a development of air traffic as the lumbering industry expands, followed by a decrease in traffic when the industry moves to another location. In some instances this trend is evident over a period of months, while in others over a period of years. This combination of factors is such that it is usually not feasible to attempt to serve such places on a regular basis. Their requirements are those of a charter service which gives a large degree of flexibility and is able to take care of the available business.

The air travel potential of the Queen Charlotte Islands is not indicated as being substantial. It would in all probability be subject to seasonal and cyclical fluctuations. However, business relations with Vancouver are such that giving consideration to a possible Prince Rupert - Vancouver route, the generated traffic of the Islands would serve to augment total revenues over some 80% of the total route distances.

As previously indicated Prince Rupert maintains extensive business connections with Vancouver. While business travel has been relatively stable, it appears that an air service which would substantially reduce the required travelling time would facilitate business developments and promote an increased volume of travel.

SECTION 7

STATISTICAL REVIEW

For the years prior to 1945 statistical reports covering the services performed on Vancouver Island are not available. However, an analysis of the returns for services, operated principally within Vancouver Island, is of sufficient value to illustrate the significant features of the five-year period 1938-1942, inclusive.

As indicated by the following table, the operating results have not been satisfactory from a financial standpoint:

Year	Operating Revenues	Operating Expenses	Net Revenue	Revenue Miles Flown
	$	$	$	
1938	17,325	13,075	4,250	26,450
1939	60,091	69,861	9,770*	152,231
1940	62,971	82,998	20,027*	169,612
1941	49,141	39,745	9,396	119,673
1942	146,259	207,832	61,573*	232,687

* Deficit

Substantial losses were incurred during three of the five years and were not offset by profits during the other two years of the period. For the entire 5-year period operations were conducted at a loss of $77,724 before interest charges. When consideration is given to the fact that during this same time a total of but 700,653 revenue miles were flown, it is evident that an average loss of 11¢ was incurred for each revenue mile flown.

The unfavourable financial aspects are not the direct result of the volume of passengers and goods traffic. As shown by the following table, the number of passengers carried increased throughout the period, while the goods traffic fluctuated considerably. However, it is to be noted that profits and losses occurred irrespective of changes in the volume of traffic, the year of greatest financial loss coinciding with the year of greatest traffic, 1942.

Year	Revenue Passengers Carried (No.)	Revenue Goods Carried (lbs.)	Mail Flown (lbs.)
1938	239	11,450	--
1939	2,105	139,642	--
1940	2,134	51,263	--
1941	3,784	29,287	26,407
1942	8,791	1,460,346	49,306

Beginning with January, 1945, detailed statistical reports substantiate the unfavourable financial aspects evidenced throughout the previous 5 years:

Year	Operating Revenues $	Operating Expenses $	Net Revenue $	Revenue Miles Flown (No.)
1945	107,144	142,101	34,957 (1)	179,173
1946 (2)	96,948	125,348	28,400 (1)	164,380

(1) Deficit.
(2) Statistics for the year 1946 estimated on the basis of 9 months' actual operation.

During this 2-year period operations were conducted with a total net loss of $63,357. Relative to the miles flown, the services have been operated at an average loss of 18¢ per revenue mile, and, in comparison with the previous period 1938 - 1942, the net operating loss has been increased by 7¢ per revenue mile flown.

Traffic statistics show a slight upward trend in the number of passengers carried, while the goods traffic has decreased to approximately the 1938 level:

Year	Total Passengers Carried (No.)	Total Goods Carried (lbs.)
1945	2,382	11,336
1946	4,205	16,197

The importance of the various communities on Vancouver Island from a revenue and traffic producing standpoint is indicated by the following table for the year 1945 and six months of 1946, wherein the revenue shown is that which is attributable only to the air services on Vancouver Island.

Station Earnings - Vancouver Island

Station		Revenue $	Passengers (No.)	Goods (lbs.)
Ceepeecee	1945	173.00	8	-
	1946 (6 months)	160.00	6	-
Chamiss Bay	1945	1,149.53	48	-
	1946 (6 months)	1,806.70	71	5
Esparanza	1945	316.24	16	-
	1946 (6 months)	222.45	12	125
McBride Bay	1945	665.53	25	37
	1946 (6 months)	797.70	35	10
Nanaimo	1945	-	-	-
	1946 (6 months)	55.00	2	100
Nootka	1945	224.07	9	12
	1946 (6 months)	64.00	4	-
Port Alberni	1945	272.33	14	22
	1946 (6 months)	613.30	34	-
Tofino	1945	1,520.53	84	-
	1946 (6 months)	824.90	47	301
Ucluelet	1945	161.24	10	-
	1946 (6 months)	116.00	6	-
Zeballos	1945	1,773.14	82	27
	1946 (6 months)	5,554.69	224	1,679
Vancouver (excl. Victoria traffic)	1945	20,774.15	793	1,912
	1946 (6 months)	19,883.42	763	3,857

Station Earnings - Vancouver Island (Continued)

Station		Revenue $	Passengers (No.)	Goods (lbs.)
Alert Bay	1945	2,491.16	93	-
	1946 (6 months)	1,718.00	73	-
Campbell River	1945	69.50	4	-
	1946 (6 months)	184.50	9	-
Coal Harbour	1945	1,157.87	41	-
	1946 (6 months)	166.00	6	-
Englewood	1945	100.79	4	-
	1946 (6 months)	170.00	7	-
Port Alice	1945	10,092.22	339	234
	1946 (6 months)	5,232.25	175	1
Port Hardy	1945	66.04	4	-
	1946 (6 months)	1,495.00	46	-
Port McNeil	1945	491.71	22	-
	1946 (6 months)	75.00	3	-
Powell River	1945	414.22	18	-
	1946 (6 months)	210.00	12	-
Quatsino	1945	248.46	10	-
	1946 (6 months)	-	-	-
Rock Bay	1945	225.18	2	-
	1946 (6 months)	-	-	-
Sayward	1945	34.75	1	-
	1946 (6 months)	-	-	-
Total	1945	42,421.66	1,627	2,244
	1946 (6 months)	39,348.91	1,535	6,078

The foregoing table indicates that of the total station earnings, approximately 50% originates at Vancouver.

While the absolute earnings vary considerably between stations, it is noted that a comparison of 1945 with six months of 1946 indicates a higher volume of revenue for Ceepeecee, Chamiss Bay, McBride Bay, Port Alberni, Zeballos, Vancouver, Campbell River, Englewood and Port Hardy. A slight increase of 1946 over 1945 revenues is noted at Esparanza, Tofino, Ucluelet, Alert Bay, Port Alice and Powell River, while Nootka, Coal Harbour, Port McNeil, Quatsino, Rock Bay and Sayward report a lower level of station revenues in 1946 compared with 1945.

Relative to the total volume of business generated within the Island, and including that between Vancouver and the Island localities under review, the three principal traffic points are Vancouver, Port Alice and Zeballos. For the first six months of 1946 their average monthly revenues have approximated $3,000, $1,000 and $1,000, respectively. As a group, they contributed 80% of the operating revenues, 76% of the passenger traffic and 91% of the goods traffic.

Chamiss Bay, Alert Bay and Port Hardy compose a secondary group with average monthly revenues approximating $300. Relative to the total originated business for the points under review, these three communities together contributed 13% of the operating revenues, 12% of the passenger traffic and less than 1% of the goods traffic.

A third group of communities having average monthly revenues of $100 or less originated an almost negligible portion of the total volume of traffic. These localities, in decreasing order of importance, include Tofino, McBride Bay, Port Alberni, Esparanza, Powell River, Campbell River, Englewood, Coal Harbour, Ceepeecee, Ucluelet, Port McNeil, Nootka and Nanaimo. During this period Quatsino, Rock Bay and Sayward have not originated any traffic. As a group these 16 communities contributed 7% of the operating revenues, 12% of the passenger traffic and 8% of the goods traffic.

Combining the station earnings on a group basis to conform with the previous division of the Island into three portions, and allocating the Vancouver traffic proportionately to the generated traffic in each section of the Island, it appears that the southern portion of Vancouver Island contributes 8% to the operating revenues, 12% to the passenger traffic and 18% to the goods traffic; the central portion 46% to the operating revenues, 48% to the passenger traffic and 82% to the goods traffic. The northern portion, on the other hand, contributes 46% to the operating revenues, 40% to the passenger traffic and none to the goods traffic.

On an individual revenue basis, it is apparent that the great majority of the communities cannot support a charter service or a regular air service. However, when considered on a group basis, sufficient business is originated within each area to warrant charter operations. A charter service at Port Alberni would meet the requirements for air service in the southern portion of the Island; a charter at Zeballos would provide for the central portion; and a charter service at Port Hardy or Port Alice would meet the requirements of the northern portion.

Beyond the irregular and local requirements within the separate areas, which can be served by conveniently located charter operators, there is some flow of traffic between the various Island points under review and Vancouver. As previously noted, the volume of this trade centre traffic is not large, but if consolidated over one route, may be sufficient to warrant a regular service. Operating conditions are such that two alternatives are possible: the first being a Vancouver - Nanaimo route operated separately from a Vancouver - Port Hardy route; the second being a single Vancouver - Nanaimo - Port Hardy route. In either event, it is apparent that traffic from the central portion of the Island must be funnelled into the through route and the indicated point appears to be Comox. Furthermore, Comox is so situated on the airway facilities that it is a logical place to receive and distribute the Powell River traffic. All traffic from within the northern portion of the Island would have to be funnelled into Port Hardy. At the present time there does not appear to be sufficient volume of trade centre traffic generated within the entire Island to permit traffic from secondary points to be diverted from the main route. It, therefore, follows that present consideration should be given to a single route from Vancouver to Port Hardy via Nanaimo and Comox.

SECTION 8

Synopsis of Public Hearing at Vancouver

A public hearing by the whole Board was held in the Vancouver Hotel, Vancouver, B.C., on Tuesday, October 15th, at which the following parties were represented:-

Canadian Pacific Air Lines	D.I. McNeill et al
Queen Charlotte Air Lines	E. Lando
British Columbia Air Lines	N.W. Whittaker, K.C.
Vancouver Board of Trade	W. Rundle
Prince Rupert Chamber of Commerce	G.A. Hunter

Licences under review - C.T.C. (A.T.) 82 and 83.

REPRESENTATIONS BY LICENSEE

Canadian Pacific Air Lines, the licensee, brought testimony to show that the obligations imposed by the licences had been faithfully observed, but he expressed the firm opinion that experience had shown that the pattern of service rendered under the licences does not best meet the requirements of public convenience and necessity. The licensee represented that none of the points on the west side of Vancouver Island, except perhaps Zeballos, can warrant a regular scheduled service and, concerning the route along the east side of the Island, including Powell River on the mainland, he expressed the opinion that the needs of the public could best be served by regular, frequent and high class landplane services from Vancouver to Victoria, Vancouver to Nanaimo, and Vancouver to Port Hardy and that, from these points, the needs of the Island and the contiguous mainland for air service can best be furnished by non-scheduled air services to specific points in accordance with fluctuating traffic demands. In support of his contention, licensee stated that landplane services of daily frequency or better, operated in conjunction with existing airline services on the mainland and using the same type of equipment and established organization could offer service at lower tolls than would be possible with the seaplane service which the existing pattern of licences necessitates.

REPRESENTATIONS BY OTHER PARTIES

Mr. G.A. Hunter, on behalf of the Chamber of Commerce of Prince Rupert, B.C., filed a brief strongly urging the establishment of a scheduled air service of daily frequency connecting Prince Rupert to Vancouver.

Mr. W. Rundle of the Vancouver Board of Trade supported the Prince Rupert brief.

Mr. E. Lando, on behalf of Queen Charlotte Airlines, announced the intention of his principals to apply for certain scheduled and non-scheduled air services to points on Vancouver Island, on the contiguous mainland, on the Queen Charlotte Islands, and Prince Rupert, B.C. He particularly emphasized the need for air service to Powell River and Comox, the traffic possibilities of which, in the opinion of his principals, had not been properly cultivated.

Mr. N.W. Whittaker, K.C., on behalf of British Columbia Air Lines, stated that his principals intended to apply for licence to operate certain non-scheduled air services in the region under review.

SECTION 9

SUMMARY

From a review of the economic characteristics of the area; the available statistical data pertaining to existing air services subject to the review, and having regard to the nature, extent and frequency of the railway, highway and water transportation facilities which are presently available for the service of the public concerned in the area, it would appear that the undermentioned commercial air services would be satisfactory and would adequately meet the present needs of the communities involved.

(a) A commercial air service (scheduled) of moderate frequency, serving Vancouver, Nanaimo and Port Hardy, which service should probably be extended to Prince Rupert via Sandspit on the Queen Charlotte Islands, Prince Rupert being one of the largest communities in British Columbia. There is no existing licence in effect covering a scheduled service between Port Hardy and Prince Rupert. This service should be performed by multi-engined aircraft of the medium airline type from Vancouver to Sandspit and amphibian type from Sandspit to Prince Rupert.

(b) Commercial air services (non-scheduled) operating from convenient bases such as Vancouver and Port Hardy, to serve such logging and fishing operations as are located along the coast of the mainland of British Columbia, and Vancouver and Queen Charlotte Islands.